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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,390	03/24/2004	Kaitaku Ozawa	018775-897	3315

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BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER	
HUNG, YUBIN	

ART UNIT	PAPER NUMBER
2624	

NOTIFICATION DATE	DELIVERY MODE
12/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com
debra.hawkins@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/807,390	OZAWA ET AL.	
	Examiner	Art Unit	
	Yubin Hung	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 March 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment/Arguments

1. This action is in response to amendment filed 09/26/07, which has been entered.

2. Claims 1-10 are still pending.

3. In view of Applicant's amendment, the objection to claims 5 and 6 has been withdrawn.

4. In view of Applicant's amendment, the 35 USC § 112 rejection of claim 6 has been withdrawn.

5. The replacement sheets for Figures 5 and 12 have not been received; therefore the objection to the drawings is maintained.

6. Applicant's arguments filed 09/26/07 have been fully considered but they are not persuasive; see below.

7. In remarks Applicant argued in substance:

7.1 *that in claim 1 (and similarly claim 7) the XML box is added into a bit stream based on a relation to data corresponding to a predetermined level of wavelet*

decomposition, while Chan includes the XML boxes at the end of the file and therefore is different from claim 1 (P. 10,1st & 2nd paragraphs)

However, the predetermined level recited in claim 1 can be the highest level (for example, the XML BOX shown in Fig. 10 of the instant application can be inserted after the codes for HH3, the highest level shown, if so desired). In Chan [see Fig. 9, refs. 9070 and 9080] the XML box is inserted at the end of the codestream, i.e., the predetermined level is the highest level (of the wavelet decomposition). Therefore the argument is not persuasive.

7.2 *that (regarding claims 2 and 8) Chan does not disclose a selector configured to allow a user to select whether to read an XML box in the middle of JPEG2000 decoding and that the XML box in Chan could only be decoded at the end of JPEG2000 decoding (P. 10, 3rd paragraph through P. 11, 2nd paragraph)*

However, per the analysis of claim2 in paragraph 9 of the 06/14/07 office action, Chan's disclosure teaches the use of a selector to allow a user to select whether to read an XML box. Although in Chan the XML box is inserted at the end of the codestream and therefore its reading can be done only after the codestream is processed (if data is received sequentially), it still is part of the overall JPEG2000 decoding process. In other words, the XML box is read "in the middle of JPEG2000 decoding" ("in the middle" is interpreted as "during"). [Note that this interpretation is consistent with what applicant

describes in the first paragraph on page 11, namely after "YES" is selected (to display text data), the process ends after the display of the text data, no further reading and decoding of data are carried out. (See also Fig. 8 and paragraphs 50, 51, 53 of the instant application).] Therefore the argument is not persuasive.

7.3 *that (regarding claims 3 and 9) in Yukihiro the compressed data and positional information are not part of the same file or placed in the same codestream and has no disclosure of XML data corresponding to position information (P. 12, last paragraph through P. 13, 1st paragraph)*

However, Yukihiro is relied upon (in the rejection of claims 3 and 9) to teach an area discriminator and a data producer that produces data corresponding to position information. The storing of specific data such as position information in an XML box that is part of a file (e.g., the JPX file shown in figure 9 of Chan) that also contains compressed data is disclosed by Chan (see the analysis of claims 3 and 9 in the 06/14/07 office action). Therefore the argument is not persuasive.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 2, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. (US 2003/0113027), and further in view of Yoko et al. (English translation of JP 2002-251352, submitted as part of the IDS).

10. Regarding claim 1, and similarly claim 7, Chan discloses

- a JPEG2000 coder which codes an image data to convert it to JPEG2000 file
  [Fig. 4; paragraphs 143-147
- an XML box adder which positions an XML box that can store a specific data into a bit stream constructing said JPEG2000 file based on a relation to data corresponding to a predetermined level of wavelet decomposition and causes said XML box to store said XML data produced by said XML data producer
  [Fig. 9, ref. 9080; Fig. 15B, ref. 15090; Fig. 17, refs. 17050 (JPEG2000 codestream, including data from all N wavelet decomposition levels), 17060 (write boxes); P. 17, paragraphs 190-192, especially lines 13-17 on the right column of P. 17, where XML box addition is disclosed]. Note that to add the XML box there necessarily has to have an XML box adder. Note further that the last level in the added codestream (ref. 17050) is the predetermined decomposition level since the number of levels (N) and the sequence of there coding are predetermined]

Chan does not expressly disclose the following, which is taught by Yoko

- an area discriminator which discriminates an area defined by each object contained in said image data and specifies type of the object
  [Fig. 3, ref. 22 (the discriminator); Fig. 7, ref. S101; P. 13, paragraph 62]

- an XML data producer which performs character recognition processing on the area discriminated as that containing a character by said area discriminator to produce a text data and produces an XML data corresponding to said text data
  [Fig. 3, refs. 23 & 25 (together considered as the data producer); Fig. 7, refs. S102 & S105; P. 13, paragraph 63 and P. 14, paragraph 66]

Chan and Yoko are combinable because they both have aspects that are from the same field of endeavor of compression.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Chan with the teaching of Yoko as recited above. The motivation would have been because characters require higher resolution than other types of data (e.g. photographic) on the same image, as Yoko indicates in paragraph 65 on pp. 13-14.

Therefore, it would have been obvious to combine Yoko with Chan to obtain the invention as specified in claim 1.

11. Regarding claim 2, and similarly claim 8, Chan further discloses JPEG2000 decoding [Fig. 8; Paragraphs 125-128]. Regarding the selector, note that the XML (and its content) is optional (and therefore is not required for the reconstruction of the image) [P. 17, right column, lines 13-17]; therefore it would have been obvious to make the extraction and processing of an XML box optional as well, i.e., to allow a user to decide whether to select it or not. In addition, Chan discloses a selector for a user to select a resolution for image reconstruction [P. 10, paragraph 126, lines 1-2]. The motivation for having user select (or not select) an XML to process would have been to ensure text

data in the XML (see the analysis of claim 1 above) can be properly shown (e.g., as ASCII resulted from OCR if the XML is selected or as image if not), regardless of the display resolution [P. 10, paragraph 126, lines 4-5]. Regarding the XML data processor, the inclusion of which would have been obvious since if XML box is user-selectable for processing then such a processor obviously is needed.

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12. Claims 3-6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. (US 2003/0113027), and further in view of Yukihiro et al. (English translation of JP 2000-251061, submitted as part of the IDS).

13. Regarding claim 3, and similarly claim 9, Chan discloses

- a JPEG2000 coder which codes an image data to convert it to JPEG2000 file
  [Fig. 4; paragraphs 143-147
- an XML box adder which adds an XML box that can store a specific data into a bit stream constructing said JPEG2000 file so as to be positioned in back of a predetermined level of wavelet decomposition and causes said XML box to store said XML data produced by said XML data producer
  [Fig. 9, ref. 9080; Fig. 15B, ref. 15090; Fig. 17, refs. 17050 (JPEG2000 codestream, including data from all N wavelet decomposition levels), 17060 (write boxes); P. 17, paragraphs 190-192, especially lines 13-17 on the right column of P. 17, where XML box addition is disclosed]. Note that to add the XML box there necessarily has to have an XML box adder. Note further that the last level in the added codestream (ref. 17050) is the predetermined decomposition level since the number of levels (N) and the sequence of there coding are predetermined]

Chan does not expressly disclose the following, which is taught by Yukihiro

- an area discriminator which discriminates an area defined in each of objects contained in said image data and acquires a position information of the area and an (XML) data producer which produces (XML) data corresponding to position information of each area discriminated by the area discriminator
  [Fig. 1, ref. 6 (save the position information); P. 8, lines 6-8. Note that per the analysis of claim 1 above Chan discloses the use of XML box to store information and it would have been obvious to

use this JPEG2000 functionality to store the position information to make such information readily available during decoding]

Chan and Yukihiro are combinable because they both have aspects that are from the same field of endeavor of compression.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Chan with the teaching of Yukihiro as recited above. The motivation would have been to save processing time and memory utilization, as Yukihiro indicates in paragraphs 9-11 on pp. 14-5.

Therefore, it would have been obvious to combine Yukihiro with Chan to obtain the invention as specified in claim 3.

14. Regarding claim 4, and similarly claim 10, Chan further discloses JPEG2000 decoding [Fig. 8; Paragraphs 125-128] and Yukihiro further teaches obtaining and storing the positions of the coded areas in the overall coded data [P. 9, paragraph 29, lines 4-6]. To take advantage of the stored position information, it would therefore have been obvious to have a position acquirer to extract such information from the code XML box (where such information is stored, per the analysis of claim 3), having a specifier to specify coded data in the JPEG2000 codestream and having a cutter to extract the specified code data. (Without them, the desired data cannot be extracted from the codestream without decoding the entire code stream and the effort in the coding

process to determine and store position information in XML boxes will be wasted, as would have been obvious to one of ordinary skill in the art. Therefore it would have been obvious to modify Chan with the teachings of Yukihiro as recited to obtain the invention of claim 4.)

15. Regarding claim 5, Chan further discloses a selector for a user to select a resolution according to the desire display resolution [P. 10, paragraph 126, lines 1-5].

16. Regarding claim 6, note that it is well known in the art that JPEG2000 supports the inclusion of a URL box that specifies the location of a source file in a JPEG2000 file and also that an XML box can contain vendor-specific information (such as an URL specified by the vendor), it would have been obvious to have an adder to add either a URL box or an XML box containing the source file location (the use of either is a matter of design choice since both perform the same function and the advantage of one over the other has not been disclosed in the instance application) so as to be able to obtain the desired data when needed.

Conclusion and Contact Information

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

- Gormish (USPUB 2006/0170955) – discloses the creation and transmission of JPM files

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yubin Hung whose telephone number is (571) 272-7451. The examiner can normally be reached on 7:30 - 4:00. If attempts to reach the

examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C. Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Yubin Hung
Patent Examiner
Art Unit 2624

December 18, 2007